

Appl. No. 10/698,871
Atty. Docket No. 9084M
Amdt. dated March 6, 2006
Reply to Office Action of February 1, 2006
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Amended) A personal care composition comprising:

- a) a personal care adjunct ingredient; and
- b) a perfume polymeric particle ~~selected from the group consisting of anionic, non-ionic and combinations thereof~~ comprising:
 - i) a anionic polymer ~~selected from the group consisting of a anionic polymer, a nonionic polymer and mixtures thereof, wherein said polymer further comprising an anionic monomer and a nonionic monomer, and~~
 - ii) a perfume comprising one or more perfume raw materials having one or more of the following characteristics:
 - a) a number molecular weight of less than about 200;
 - b) a boiling point of less than about 250°C;
 - c) a ClogP of less than about 3; and
 - d) a Kovats Index value of less than about 1700;

wherein a Response Factor (RF) of the perfume polymeric material is at least about 1.6.

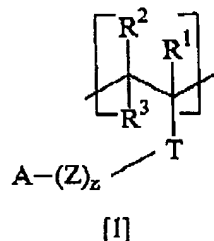
Claim 2. (Original) The personal care composition according to Claim 1, further comprising at least about 0.1 weight percent of one or more perfume raw material.

Claim 3. (Original) The personal care composition according to Claim 2, wherein at least 25 weight percent of said perfume raw materials have a Kovats Index value of less than about 1700.

Claim 4. (Original) The personal care composition according to Claim 1 wherein said perfume polymeric polymer further comprising a cationic monomer.

Appl. No. 10/698,871
 Atty. Docket No. 9084M
 Amdt. dated March 6, 2006
 Reply to Office Action of February 1, 2006
 Customer No. 27752

Claim 5. (Original) The personal care composition according to Claim 4 wherein said cationic monomer having the formula:



wherein each of R^1 , R^2 and R^3 are independently selected from the group consisting of hydrogen, C_1 to C_6 alkyl, and mixtures thereof; T is selected from the group consisting of substituted or unsubstituted, saturated or unsaturated, linear or branched radicals selected from the group consisting of alkyl, cycloalkyl, aryl, alkaryl, aralkyl, heterocyclic ring, silyl, nitro, halo, cyano, sulfonato, alkoxy, keto, ester, ether, carbonyl, amido, amino, glycidyl, carbanato, carbamate, carboxylic, and carboalkoxy radicals and mixtures thereof; Z is selected from the group consisting of: $-(CH_2)-$, $(CH_2-CH=CH)-$, $-(CH_2-CHOH)-$, $(CH_2-CHNR^4)-$, $-(CH_2-CHR^5-O)-$ and mixtures thereof; z is an integer selected from about 0 to about 12; A is selected from the group consisting of NR^6R^7 , $NR^6R^7R^8$ and mixtures thereof;

wherein each of R^6 , R^7 and R^8 , when present, are independently selected from the group consisting of H, C_1 - C_8 linear, branched alkyl, alkyleneoxy having the formula:



and mixtures thereof;

wherein R^9 is selected from the group consisting of C_2 - C_4 linear, branched alkylene, carbonyl alkyl, and mixtures thereof; R^{10} is selected from the group consisting of hydrogen, C_1 - C_4 alkyl carbonyl alkyl, and mixtures thereof; y is from 1 to about 10.

Claim 6. (Amended) The personal care composition according to Claim 1, which further comprises a cationic deposition polymer aggregated with said anionic perfume polymeric particle.

Appl. No. 10/698,871
Atty. Docket No. 9084M
Amdt. dated March 6, 2006
Reply to Office Action of February 1, 2006
Customer No. 27752

Claim 7. (Original) The personal care composition according to Claim 6 wherein the cationic deposition polymer is selected from cationic deposition polymers with flocculation time of less than 30 minutes as described in a Flocculation/Settling Test.

Claim 8. (Amended) The personal care composition according to Claim 1 wherein perfume polymeric particles ~~comprising said anionic and nonionic polymers~~ further comprises non-cationic monomer comprising a hydrophobic group selected from the group consisting of alkyls, cycloalkyls, aryls, alkaryl, aralkyls and mixtures thereof.

Claim 9. (Original) The personal care composition according to Claim 8 wherein the non-cationic monomer is selected from the group consisting of: methyl methacrylate, methyl acrylate, ethyl acrylate, n-propyl acrylate, iso-propylacrylate, n-propyl methacrylate, ethyl methacrylate, iso-propylmethacrylate, n-butyl acrylate, isobutyl acrylate, isobutyl methacrylate, n-butyl methacrylate, methacrylic acid, acrylic acid, acrylamide, methacrylamide, styrene, α -methyl styrene, benzyl acrylate, ethylhexylacrylate, hydroxyethylacrylate, hydroxypropylacrylate, hydroxyethylmethacrylate, hydroxypropylmethacrylate, hydroxybutylacrylate, hydroxybutylmethacrylate, PEG acrylate, acylamido-2-methylpropanesulfonic acid, vinylsulfonate, vinylpropionate, methylallylsulfonic acid, N-vinylformamide and N-vinylpyrrolidone and mixtures thereof.

Claim 10. (Amended) The personal care composition according to Claim 1 wherein said anionic and ~~nonionic~~ polymers are a water-insoluble polymer.

Claim 11. (Canceled)

Claim 12. (Original) The personal care composition according to Claim 1 wherein greater amounts of said perfume raw material is deposited onto a substrate and released from a substrate when the perfume raw material is associated with said polymer in the form of the perfume polymeric particle as measured by the Perfume Deposition & Delivery Test Protocol I.

Claim 13. (Original) The personal care composition of Claim 1, wherein one or more Low Kovats Index perfume raw materials, each having a Kovats Index value of from about 1000 to about 1400, and collectively provide a first Average Response Factor

Appl. No. 10/698,871
Atty. Docket No. 9084M
Amdt. dated March 6, 2006
Reply to Office Action of February 1, 2006
Customer No. 27752

(ARF_{LKI}); and one or more High Kovats Index perfume raw materials, each having a Kovats Index value of greater than about 1700, and collectively provide a second Average Response Factor (ARF_{HKI});

wherein the perfume polymeric particle has a selectivity ratio of ARF_{LKI} / ARF_{HKI} of at least about 1.2.

Claim 14. (Original) The personal care composition of Claim 13 wherein Longevity Test I value provides an ARF_{LKI} greater than or equal to 1.6 times the value of ARF_{HKI}.

Claim 15. (Original) The personal care composition of Claim 13 wherein Longevity Test II value provides an ARF_{LKI} greater than or equal to 1.6 times the value of ARF_{HKI}.

Claim 16. (Amended) A personal care composition comprising:

- a) a personal care adjunct ingredient; and
- b) a perfume polymeric particle ~~selected from the group consisting of anionic, non-ionic and combinations thereof comprising:~~
 - i) a anionic polymer ~~selected from the group consisting of a anionic polymer, a nonionic polymer and mixtures thereof, wherein said polymer further comprising an anionic monomer and a nonionic monomer which~~ exhibits a greater affinity for a perfume raw material having a Kovats Index value of less than about 1700, than other perfume raw materials as measured by the Perfume Deposition & Delivery Test Protocol I and/or the Polymeric Particle Affinity Test Protocol II

wherein the Longevity Test II value provides a ARF_{LKI} greater than or equal to 1.2 times the value of ARF_{HKI}.

Claim 17. (Original) The personal care composition according to Claim 16 wherein said polymer exhibits at least a 1.6 times the affinity for a perfume raw material having a Kovats Index on DB-5 of between about 1000 to about 1500 than other perfume raw materials having a Kovats Index on DB-5 of greater than about 1700 as measured by the Perfume Deposition & Delivery Test Protocol I and the Polymeric Particle Affinity Test Protocol II.

Claim 18. (Original) A method for making a personal care composition, which exhibits enhanced fragrance intensity on skin and hair over time, comprising

Appl. No. 10/698,871
Atty. Docket No. 9084M
Amdt. dated March 6, 2006
Reply to Office Action of February 1, 2006
Customer No. 27752

- a. forming a preformed polymeric particle comprising a anionic polymer selected ~~from the group consisting of a anionic polymer, a nonionic polymer and mixtures thereof, wherein said polymer further comprising an anionic monomer and a nonionic monomer, wherein said polymer~~ which exhibits a greater affinity for a perfume raw material having one or more of the following characteristics;
 - i) a number molecular weight of less than about 200;
 - ii) a boiling point of less than about 250°C;
 - iii) a ClogP of less than about 3;
 - iv) a Kovats Index value of less than about 1700, than other perfume raw materials as measured by the Perfume Deposition & Delivery Test Protocol I and/or the Polymeric Particle Affinity Test Protocol II;
- b. forming a perfume polymeric particle by mixing the preformed polymeric particles with a perfume comprising a perfume raw material having one or more of the following characteristics;
 - i) a molecular weight of less than about 200;
 - ii) a boiling point of less than about 250°C;
 - iii) a ClogP of less than about 3; and
 - iv) a Kovats Index value of less than about 1700 to; and
- c. contacting the perfume polymeric particle with a personal care adjunct ingredient to form the personal care composition.

Claim 19. (Amended) A method for treating skin and hair of human and pet subject in need of treatment comprising:

- a) contacting the subject with a perfume polymeric particle comprising:
 - i) a anionic polymer selected ~~from the group consisting of a anionic polymer, a nonionic polymer and mixtures thereof, wherein said anionic polymer further comprises comprising an anionic monomer and a nonionic monomer~~ and a perfume comprising one or more perfume raw materials having one or more of the following characteristics;
 - a) a number molecular weight of less than about 200;
 - b) a boiling point of less than about 250°C;
 - c) a ClogP of less than about 3;
 - d) a Kovats Index value of less than about 1700; and

Appl. No. 10/698,871
Atty. Docket No. 9084M
Amdt. dated March 6, 2006
Reply to Office Action of February 1, 2006
Customer No. 27752

- b) rinsing off the personal care composition, such that the subject's skin and hair is treated.

Claim 20. (Amended) A method for treating human and animal subject's hair and skin comprising:

- a) contacting the subject's skin and hair with a perfume polymeric particle comprising:
- i) ~~an anionic polymer selected from the group consisting of a~~
~~anionic polymer, a nonionic polymer and mixtures thereof, wherein said~~
~~polymer further comprising an anionic monomer and a nonionic~~
~~monomer; and a perfume comprising one or more perfume raw materials~~
having one or more of the following characteristics;
- a) a number molecular weight of less than about 200;
- b) a boiling point of less than about 250°C;
- c) a ClogP of less than about 3;
- d) a Kovats Index value of less than about 1700; and
- a) leaving on the personal care composition, such that subject's skin and hair is treated.

Claim 21. (Original) A personal care composition comprising two or more different polymeric particles and a perfume comprising;

- a) a perfume raw material having a one or more of the following characteristics;
- i) a number molecular weight of less than about 200;
- ii) a boiling point of less than about 250°C;
- iii) a ClogP of less than about 3;
- iv) a Kovats Index value of less than about 1700; and
- b) a personal care adjunct ingredient;
- wherein the Longevity Test II value provides a ARF_{LKI} greater than or equal to 1.2 times the value of ARF_{HKI} .

Claim 22. (Original) The personal care composition according to Claim 21, further comprising at least about .01 weight percent of said polymeric particle.